



Docket No.: 1454.1610

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Elena COSTA et al.

Serial No. 10/532,346

Group Art Unit: 2617

Confirmation No. 3925

Filed: April 22, 2005

Examiner: Jaime Michele Holliday

For: METHOD FOR RADIO SYSTEM RESOURCE MANAGEMENT

PRE-APPEAL BRIEF CONFERENCE REQUEST

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450
Mail Stop AF

Applicants request review of the final rejection in the above-identified application. The outstanding final Office Action followed the filing of an Appeal Brief in the above identified patent application. In the outstanding Office Action, independent claims 15, 27 and 28 are again rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,052,593 to Guimont et al. (hereinafter "Guimont") in view of U.S. Publication No. 2004/001429 A1 to Ma et al. ("Ma"). This request for a Pre-Appeal Brief review is being filed with a Notice of Appeal. The review is requested for the following reasons:

I. Ma and Guimont do not render obvious the allocation to radio cells

Guimont discloses a method for assigning frequencies to transceivers in cells of a cellular telephone system supporting analog and/or digital communications channels (see col. 1, lines 10-13 of Guimont). A frequency assignment proposal is evaluated to determine whether it is compatible with a current cell configuration, by insuring that sufficient frequencies having appropriate operating modes are available for assignment to meet the traffic and control channel requirements and availability of the included cell transceivers. (See Guimont's Abstract.) Approved proposals result in a revision of the frequency plan assignment. Based on records of past approved proposals, it is determined whether a current proposal if implemented would have an adverse effect on the network.

FIG. 1 of Guimont illustrates the cells 10 being grouped in clusters of 10. Each cluster

uses all the available frequencies (A to G) while any single cell of a cluster uses only a subset A of the available frequencies. (See col. 4, lines 7-40.) Although the allocation of the frequencies may be changed, the allocation can be maintained for long periods, it is not dynamically periodically changed according to a predetermined sequence of allocation schedules.

Ma discloses a wireless terminal for communicating over a shared Orthogonal Frequency Division Modulation (OFDM) band, the wireless terminal having a first transmit chain for generating and transmitting a low rate mode OFDM transmission in a first frequency band of the OFDM band, and a second transmit chain for generating and transmitting a burst-mode transmission in a second frequency band of the OFDM band, the first frequency band being distinct from the second frequency band.

Figure 2 of Ma illustrates the usage of OFDM frequencies 1-32. Each circle represents the transmission of a single sub-carrier during a single transmission (see [0122]). Mode 1 sub-carriers are used for low rate circuit oriented connectivity, while Mode 2 sub-carriers used for higher rate bursting connectivity. At certain times, e.g. between t_{i+10} and t_{i+11} , all the carriers may be used for Mode 2.

Guimont and Ma do not render obvious "temporarily during a first time period allocating the sub-carriers to the radio cells, to make the sub-carriers available during a first time period to each radio cells for transmission of information" and "allocating the sub-carriers to the radio cells during a second time period, the sub-carriers being allocated by assigning each of the sub-carriers only to a subset of the radio cells including at least two radio cells for transmission of the information."

Guimont's and Ma's teachings would lead a person of ordinary skill in the art to a method having the following features: (1) dividing the radio frequencies in the cellular frequency band according to a frequency band into frequency groups, (2) grouping cells into clusters, (3) assigning a different frequency group to each cell of a cluster, and (4) allocating frequency groups (sub-carriers) to different transmission modes during different time periods.

That is, even if Guimont generally discloses allocating subcarriers to radio cells, it does not anticipate or render obvious at least making the sub-carriers available temporarily during a first time period to each radio cell for transmission of information in claim 15. A person of ordinary skill in the art would understand that "temporarily during a first time period" teaches a planned limited time interval and not a random state. The fact that the first allocation will last only a predetermined time according to a predefined time pattern is conveyed to a person of ordinary skill in the art by the recitation "temporarily during a first time period."

In contrast in Guimont, it is possible to have no change in the allocation.

Further, even if Ma discloses an allocation of sub-carriers to modes in different time-frames, **not** allocating the sub-carriers to the radio cells as recited in claim 15.

The Office Action has provide no basis for the assertion that a person of ordinary skill in the art would use Ma's teachings directed to an allocation of sub-carriers to modes in different time-frames, to modify the Guimont method that includes no planned (e.g in view of only "temporarily during a first time period" having the allocating the sub-carriers to the radio cells, to make the sub-carriers available to each radio cells) modification of the allocation of the sub-carriers to the radio cells.

The advantages achieved by the claimed method are not possible with the method resulting merely from combining Guimont and Ma as outlined above. The claimed method provides the information necessary for handover decisions and serves as a basis for reducing interference and enabling a higher spectrum efficiency (see paragraphs [0036]-[0039] on pages 9-10 of the specification).

II. The combination of Guimont and Ma is a hindsight reconstruction of the claimed invention

In the response to arguments section the Examiner challenges the legal basis of Applicant's arguments stating that

(1) "one cannot show non-obviousness by attacking references individually where the rejections are based on combination of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)" (see Page 2, lines 9-12 in the "Response to Arguments" section); and

(2) "it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971)" (see page 5, lines 5-11 in the "Response to Arguments" section).

In response to (1), Applicant respectfully submit that Applicant's arguments did not argue the references individually, but argued that none of the references disclose or render obvious the features recited in the claims. In particular, Applicant argues that Ma discloses an allocation of sub-carriers to modes in different time-frames, **not** allocating the sub-carriers to the radio cells

as recited in claim 15.

Additionally, as stated in MPEP 2143.03, all claim limitations must be considered. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Moreover, as stated in MPEP 2141.02, the differences between the prior art and the claims at issue requires interpreting the claim language, and considering both the invention and the prior art references as a whole.

Applicant respectfully submit that even if *arguendo*, the Examiner has made a *prima facie* case of obviousness, Applicant has rebutted the Examiner's arguments and instead of responding to Applicant's arguments the Office Action substantially repeats verbatim the rejections put forth in the prior Final Office Action which has been appealed.

Regarding (2), all the authority cited by the Examiner is superseded by the Supreme Court decision U.S. Supreme Court decision *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385, 1395-97 (2007). According to this decision the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious (see MPEP 2143). The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. should be made **explicit**. A number of admissible rationales are put forth in the decision none of which being hindsight reconstruction.

In this case the Examiner has not met the burden of explicitly showing a reason for combining the features of the applied prior art references.

CONCLUSION

The proposed combination of references relied upon in rejecting the claims under 35 U.S.C. §103 does not teach or suggest every element of the claims. Further, a valid line of reasoning from the prior art providing a suggestion or motivation to combine the references has not been presented. Accordingly, the Applicants respectfully submit that the Examiner's rejections are clearly without basis and should be withdrawn. Further, the Applicants respectfully request that the Office issue a finding that the application is allowed on the existing claims and that prosecution remains closed.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Sept 9, 2009

By: L. Todor
Luminita A. Todor
Registration No. 57,639

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501